## ABSTRACT OF THE DISCLOSURE

A method is disclosed for treatment and prevention of obesity, an overweight condition or for controlling body weight reduction, wherein an effective amount of a fatty acid composition comprising at least one of (all-Z omega-3)-5,8,11,14,17-eicosapentaenoic acid (EPA) and (all-Z omega-3)-4,7,10,13,16,19-docosahexaenoic acid (DHA) or any combinations thereof, is administered to a human or an animal. Additionally, a dietary product is disclosed, containing a fatty acid composition comprising at least one of EPA and DHA or any combinations thereof, for non-medical treatment of obesity, an overweight condition and/or for supporting and controlling body weight reduction. Finally, a method is disclosed for supplementing a dietary product with a fatty acid composition mentioned above.